

REMARKS

The Office Action mailed December 30, 2003 has been reviewed and the comments of the Patent and Trademark Office have been considered. Claims 1-7 were pending in the application. Claims 6 and 7 have been amended, no claims have been cancelled or newly added. Therefore, claims 1-7 are pending in the application and are submitted for reconsideration.

Preliminarily, applicants note that on the Office Action Summary, at box 10, the boxes related to the drawings filed on October 7, 2003, are unchecked. Applicants request an indication from the examiner that the drawings were accepted.

This amendment changes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

Applicants sincerely thank the examiner for indicating that claim 2 contains allowable subject matter.

In the Office Action, claims 1, 6, and 7 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.K. patent 2,347,120 (hereafter "UK '120"). Claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over UK '120 in view of Japanese document 6-107103 (hereafter "JP '103). Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over UK '120 in view of Japanese document 6-144141 (hereafter "JP '141). Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over UK '120 in view of U.S. patent 6,402,189 to Gray et al. (hereafter "Gray"). Applicants respectfully traverse these rejections, for at least the following reasons.

Independent claim 1 recites a first and second hinge portion such that the second hinge portion is bent when the inflation pressure of the air bag body is lower than a predetermined value to cause formation of the inflation opening to be started. Claim 6 recites that the first hinge has a flexural rigidity that is greater than the second hinge portion. Claim 7 recites that the first hinge portion only bends when the inflation pressure of the air bag body is at or above the predetermined value (i.e., the first hinge portion bends only when the inflation pressure exceeds the pressure at which the second hinge portion is bent). These recited features are not disclosed or suggested by the applied prior art.

Specifically, the Office Action erroneously states that the hinge 5e corresponds to the claimed first hinge portion. Using the definition from the American Heritage Dictionary used in the Office Action, a hinge is defined as “(1) a jointed or flexible device that (2) allows the turning or pivoting of a part, such as a door or a lid.” Neither of these aspects (of the hinge definition) are present in the portion 5e which is defined in the UK ‘120 patent as “...an intermediate portion 5e of the lid plate reinforcement 5 which is inwardly bent from the hinge 5b” See page 5, lines 20-23 of UK ‘120. That is, portion 5e is a rigid portion about which nothing does or could pivot.

First, the portion 5e is neither jointed nor flexible. As one skilled in the mechanical arts would recognize, a hinge requires a joint or flexible portion (i.e., in the hinge itself) about which the pivotable part (for example, a door) pivots. That is, there is no part of the portion 5e itself that is flexible or jointed. Rather, the portion 5e appears to be a rigid portion that cannot serve as a hinge. *Second*, there is nothing that pivots about any flexible or jointed portion of 5e, since as discussed above the portion 5e is a rigid portion that does not include any flexible or jointed portion within itself (as would be necessary for it to function as a hinge). It should be noted that the door or lid plate 4 pivots about the hinge 5b. There is no joint or flexible portion in portion 5e itself that causes the door or lid plate 4 (or anything else) to pivot about the rigid portion 5e itself. Therefore, the portion 5e does not read on the claimed first hinge for each of the following reasons: (1) using the dictionary definition provided in the Office Action; (2) as understood by one skilled in the art; and (3) as used in the UK ‘120 patent which specifically refers to 5b as a hinge but does not refer to 5e as a hinge. Moreover, whether or not the term “portion” is included in the claim, the hinge feature must be present, which is not true for 5e in UK ‘120.

Furthermore, claim 1 recites that the second hinge portion is bent at a value that is *below* a predetermined value, such as the operating pressure, so that inflation opening is started more quickly. There is no such teaching or suggestion in UK ‘120. The only thing UK ‘120 shows is bending both 5b and 5e when the airbag is released, but this does not necessarily mean 5b bends ahead of the pressure reaching that operation value. That is, UK ‘120 depicts the traditional operation of releasing the air bag and the pressure bends 5b and moves 5e. Therefore, there is no teaching or suggestion in UK ‘120 of the claimed

second hinge portion being bent when the inflation pressure of the air bag body is *lower* than the predetermined value at which the formation of the inflation opening is *started*.

In sharp contrast to the disclosure of UK '120, the claimed invention, as exemplified, discloses a two hinge structure such that the second hinge portion 32 is bent when the inflation pressure of the air bag body is lower than the predetermined value at which the inflation opening is started. When the inflation opening then reaches a higher value (i.e., the predetermined value), the first hinge portion 30 is bent. In an alternate, exemplary operation mode, only the second hinge portion 32 is bent by a low inflation pressure of the air bag body while the first hinge portion 30 is not substantially bent and an inflation opening is formed only by the second hinge portion. See, for example, pages 16-17 of the specification.

Accordingly, neither the claimed two hinge air bag structure nor the second hinge portion being bent when the inflation portion is lower than a predetermined value that causes the formation of the inflation opening to be started is disclosed or suggested by UK '120. Furthermore, since this deficiency in UK '120 is not cured by any of the other applied references, independent claim 1 is patentable over the applied prior art. That is, neither the structure nor the advantages of the claimed invention are disclosed or suggested by the applied prior art.

The dependent claims are also in condition for allowance for at least the same reasons, as discussed above, as the respective independent claims on which they ultimately depend. In addition, they recite additional patentable features when considered as a whole.

For example, claims 6 and 7 recite that the first hinge portion has a flexural rigidity greater than the second hinge portion and that the first hinge portion bends only at a pressure greater than required to bend the second hinge portion. As discussed herein, UK '120 does not disclose the claimed two hinge structure since 5e is not disclosed to be a hinge. Furthermore, the Office Action asserts that the presence of the additional layer 9c would cause the portion 5e to bend only after the hinge 5b has been bent. However, UK '120 teaches only that the pressure at which the hinge 5b is bent is also sufficient to move the integral portion 5e so that the lid portion 4 can be opened and the air bag expanded. In this regard, the Office Action indicates that the asserted first hinge portion 5e bends, but is simply not shown in Figures 3-6 that the element 5e itself bends (as would be required if it were a

hinge). There is no indication of the hinge 5b bending at below a predetermined inflation value at which the inflation opening is started and the part 5e then bending only when the predetermined inflation value is reached. Therefore, there is simply no teaching in UK '120 of these claimed features and using the applicants own teaching to render obvious their invention is impermissible hindsight reconstruction. Therefore, these claims recite features that are not disclosed in the applied prior art and provide additional reasons for the patentability of these claims.

In view of the above, applicants respectfully request entry and reconsideration of the instant amendment and reply because it is believed to place the application in condition for allowance or at the very least reduce the number of potential issues in an appeal. If there are any questions regarding the application, or if an examiner's amendment would facilitate the allowance of one or more of the claims, the examiner is invited to contact the undersigned attorney at the local telephone number below.

Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge deposit account No. 19-0741 for any such fees; and applicants hereby petition for any needed extension of time.

Respectfully submitted,

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